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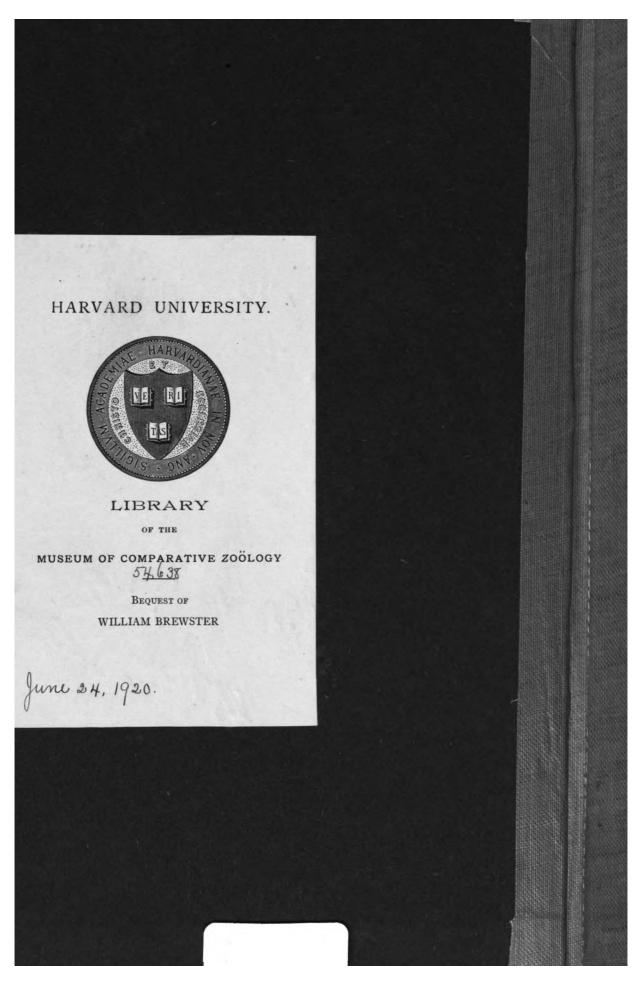
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## ADDITIONAL LIST OF BOULDER COUNTY BIRDS, WITH COMMENTS THEREON

By
JUDGE JUNIUS HENDERSON

Boulder, Colorado July, 1904

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## ADDITIONAL LIST OF BOULDER COUNTY BIRDS, WITH COMMENTS THEREON

By Junius Henderson

Since the publication of the preliminary list in Vol. I, No. 3, of UNIVERSITY OF COLORADO STUDIES, April, 1903, the following species have come to our attention, making a total of 206 species now recorded for the County:

Podilymbus podiceps.—Pied-billed grebe.

Aythya marila.—American scaup duck (Felger).

Aythya affinis.—Lesser scaup duck (Felger, Henderson).

Clangula americana.—American goldeneye (Felger).

Oidemia deglandi.--White-winged scoter (Felger).

Olor columbianus.—Whistling swan.

Porzana carolina.—Carolina or sora rail (Felger, Henderson).

Steganopus tricolor.—Wilson phalarope (Henderson).

Helodromas solitarius.—Solitary sandpiper (Felger).

Accipiter atricapillus.—American goshawk (Sprague).

Buteo swainsonii.—Swainson hawk (Henderson).

Dryobates pubescens homorus.—Batchelder woodpecker (Henderson).

Picoides americanus dorsalis.—Alpine three-toed woodpecker (Felger).

Sphyrapicus thyroideus.—Williamson sapsucker (Sprague, Felger).

Tyrannus verticalis.—Arkansas kingbird (Dille).

Empidonax difficilis.—Western flycatcher (Sprague, Brackett).

Empidonax wrightii.—Wright flycatcher (Henderson).

Aphelocoma woodhousei.—Woodhouse jay (Bragg, Henderson).

Cyanocephalus cyanocephalus.—Piñon jay (Dille).

Dolichonyx oryzivorus.—Bobolink (rare, Brackett, Bragg, Henderson).

Agelaius phoeniceus.—Red-winged blackbird.

Carpodacus cassini.—Cassin purple finch (Sprague, Henderson, Bragg).

Astragalinus psaltria.—Arkansas goldfinch.

Spinus pinus.—Pine siskin (Sprague, Henderson, Bragg).

Poœcetes gramineus confinis.—Western vesper sparrow.

Chondestes grammacus strigatus.—Western lark sparrow.

Zonotrichia leucophrys gambeli.—Gambel sparrow.

Spizella socialis arizona.—Western chipping sparrow (Sprague, Henderson).

Spizella breweri.—Brewer sparrow (Henderson, Felger).

Junco hyemalis.—Slate-colored junco.

Junco montanus.-Montana junco.

Amphispiza belli nevadensis.—Sage sparrow (Dille).

Melos piza cinerea montana.—Mountain song sparrow.

Zamelodia ludoviciana.—Rose-breasted grosbeak (Cooke).

Zamelodia melanocephala.—Blackheaded grosbeak.

Guiraca cærulea lazula.—Western blue grosbeak (Felger, Dille).

Spiza americana.—Dickcissel.

Tachycineta thalassina lepida.—Northern violet-green swallow (Felger, Henderson).

Lanius ludovicianus excubitorides.—White-rumped shrike (Dille).

Dendroica coronata.—Myrtle warbler (Bragg, Henderson).

Geothlypis trichas occidentalis.—Western yellow throat (Henderson).

Wilsonia pusilla pileolata.—Pileolated warbler.

Oroscoptes montanus.—Sage thrasher (Dille).

Toxostoma rujum.—Brown thrasher (Henderson).

Certhia familiaris montana.—Rocky Mountain creeper (Sprague, Henderson).

Sitta carolinensis aculeata.—Slender-billed nuthatch (Sprague).

Sitta Canadensis.—Red-breasted nuthatch (Sprague).

Regulus calendula.—Ruby-crowned kinglet (Sprague).

Hylocicla ustulata almae.—Alma thrush (Dille).

The same plan has been followed as in the preliminary list, of placing the name of the person upon whose authority the species is reported in parentheses after the common name, in all cases where Boulder County specimens are not in the University collection. The additional list is gathered from the notes of Dr. J. R. Brackett, Professor A. H.

Felger, F. M. Dille, William A. Sprague, L. C. Bragg, and the writer, except so far as they appear in the collection. A manuscript list received from Mr. Sprague shows eighty-one species noted by him in the county, all of which, however, are included either in this or the one published last April.

The red-winged blackbird was omitted from the former list through inadvertence, not through ignorance of its occurrence here, as so conspicuous and plentiful a species could hardly escape observation. The record of the jaeger should have been parasitic jaeger (Stercorarius parasiticus) instead of pomarine jaeger (S. pomarinus). The interrogation point after the dwarf thrush in the former list should be removed, Mr. Sprague's identification having been confirmed by Mr. Ridgeway.

The finding of the western blue grosbeak near Left Hand Creek is an important item, as it had heretofore not been reported north of Colorado Springs in this state, so far as the writer is aware, except one specimen taken at Morrison. Professor A. H. Felger has taken one specimen (the first) and F. M. Dille another near Altona, and the latter reports several others at the same place.

The sage sparrow reported by Mr. Dille seems to be the second record east of the Front Range, the first being Mr. Bond's specimen at Cheyenne. The white-winged scoter appears to be the eighth for Colorado, Dr. Bergtold's specimen recorded in the Auk as the ninth having been taken on October 11, 1903, while Professor Felger's was taken at Longmont on October 20, 1901. The scaup duck was mentioned in the first list, but the specific identity was in doubt, so that the identification of the two species only adds one to the total number of species for the county. The goldeneye adds nothing to the former list, so far as the number of species known to occur here is concerned. The rose-breasted grosbeak is the one at Longmont mentioned in Professor Cooke's bulletins.

Possibly the Wilson warbler (Wilsonia pusilla) should be added to the list, as specimens from Boulder County so labeled are found in at least one collection; but inasmuch as pileolata is common in the county and in Colorado generally, while pusilla is declared by Ridgeway and others only "occasional during migration in Colorado," it seems best

to omit the latter until further investigation clears up the doubt. The specimens in the University collection are *pileolata*, some of them having been identified by the United States Biological Survey. A series of juncos identified at the same time clears up some of the doubts concerning that genus for this county. The most troublesome specimen is declared a hybrid (not a true intergrade)— $J.\ aikeni \times J.\ mearnsi$ . This gives us two hybrids, as the supposed species  $J.\ annectens$ , heretofore listed, is now considered a hybrid— $J.\ caniceps \times J.\ mearnsi$ . This eliminates  $J.\ annectens$  from the former list, but we add  $J.\ montanus$ , so that the total remains unchanged by that omission. The juncos, eliminating the two hybrid forms, for the county, now stand as follows:

Junco aikeni.—white-winged junco.

Junco oregonus shufeldti.—Shufeldt junco (J. h. connectens).

Junco hyemalis.—Slate-colored junco.

Junco montanus.—Montana junco.

Junco mearnsi.—Pink sided junco.

Junco caniceps.—Gray-headed junco.

Professor Felger confirms the occurrence of the ring-necked duck (Aythya collaris), lesser scaup duck (A. affinis), American scaup duck (A. marila), and American goldeneye (Clangula americana). The writer confirms the occurrence of McGillivray warbler by a specimen taken above Camp Albion last September. The sora rail was found dead by Professor Felger, in company with the writer, on the surface of the ice near the terminal moraine of Arapahoe Glacier, last September.

One evening during the summer of 1903 a flock of about fifteen crows or ravens passed over Mapleton Hill, Boulder, just after sundown, flying barely over the housetops. The writer was unable to determine the species. If they were crows (Corvus americanus) or American ravens (C. corax sinuatus), another species would be added to the known Boulder County avifauna; but from the fact that the range of the former in Colorado is confined chiefly to the northeastern part of the state, and the range of the latter chiefly to the mountains and westward, while the range of the white-necked raven (C. crypto-leucus) was along the eastern base of the mountains before the species

became so rare, it is likely that the birds were of the last-named species, which has been already recorded for Boulder County.

The rapidity with which the white-necked raven has decreased in numbers in the foothill region is an excellent illustration of the effect of civilization upon the fauna of a newly settled country. It is to be regretted that more work was not done in the preservation of natural-history records while the country was in its original condition, in order that the many changes could be determined. It is hoped that much may yet be done along this line in unsettled portions of the state, by trained workers, capable of making accurate observations. The state should establish a natural-history survey under the direction of the University, to carry on this work systematically and effectively, with reliable observers well distributed, working systematically, and co-operating with each other, in order to eliminate the speculation and guesswork which have had so pernicious an influence upon natural history in the past, and even now fill so many of the so-called "nature books" in common use in the graded schools and in American homes.

The listing of species is but a first step in ornithological investigations, to facilitate the solution of numerous other problems, such as local distribution, summer and winter range, breeding habits, migration, food habits, and so on.

It must not be supposed that the list of birds of Boulder County is anywhere near complete. It is likely that at least fifty or sixty species will yet be added. Conditions are so diverse that a large list may be expected. The plains area forming the eastern portion of the county, dotted with lakes and crossed by streams of various size, fertile fields alternating with dry mesas, presents to the ornithologist an avifauna in part peculiar to itself. The foothill region is the home of other species rarely found on the plains or among the higher peaks. The snow-clad peaks furnish abiding places for species not found much below timber line. Other species seem able to adapt themselves to a great variety of conditions and may be found from the plains nearly to the top of the range.

The study of bird migration in this vicinity is complicated by at least one feature not found in more level countries. Many species here, as

everywhere, pass through twice a year on their northward and southward journeys, stopping but a few hours, if at all, to eat and rest. Others come from the south, remain through the summer, and return to their winter homes with the first breath of cold weather. Others spend their summers in the north, rear their young there, but come here for winter. Others remain with us throughout the year. In addition to the usual latitudinal migration, however, we have here a pronounced altitudinal migration. To illustrate, grayheaded juncos breed in large numbers in the mountains, up to timber line. In the winter they come down to the valley to join their cousins from the north, so that one not familiar with their summer range might suppose they also came from the north. Severe weather also brings some of the Rocky Mountain jays down to the valley. The long-crested jay may be seen all summer in the foothills, but seldom come into Boulder City until after the first frosts, when they arrive in considerable numbers and remain until spring. There are also reasons for supposing that some species make a sort of altitudinal migration between broods, raising their two broods at different altitudes. Others apparently indulge in erratic movements singly or in flocks after the breeding season and before the southward movement. The erratic movements of such birds as the evening grosbeak are such that it is difficult to connect them with any known change of conditions, though it seems likely that the supply of preferred food would furnish the key to the movements. From this it seems clear that the problems confronting the ornithologist require extensive observations which can only be obtained by scattered observers working in unison. Such work the United States Biological Survey is doing for the country at large, by tabulating the migration records of observers all over the land; but for the local and state problems more minute data are required.

